

## UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/297,703	07/19/1999	STEPHEN A. JOBLING	CASE#1637	1158
75	90 12/03/2002			
KAREN G. KAISER NATIONAL STARCH AND CHEMICAL CO. P.O. BOX 6500			EXAMINER	
			KUBELIK, ANNE R	
BRIDGEWATER, NJ 08807		ART UNIT	PAPER NUMBER	
			ARTOMI	TATER NOMBER
			1638	() 7
			DATE MAILED: 12/03/2002	$\sim$

Please find below and/or attached an Office communication concerning this application or proceeding.

,	Application No.	Applicant(s)				
Advisory Action	09/297,703	JOBLING ET AL.				
	Examiner	Art Unit				
	Anne R. Kubelik	1638				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
THE REPLY FILED 18 November 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.						
PERIOD FOR REPLY [check either a) or b)]						
a) The period for reply expiresmonths from the mailing date of the final rejection.  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
1. A Notice of Appeal was filed on <u>18 November 2002</u> . Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.						
2. The proposed amendment(s) will not be entered because:						
(a) ⊠ they raise new issues that would require further consideration and/or search (see NOTE below);						
(b) they raise the issue of new matter (see Note below);						
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or						
(d) 🔲 they present additional claims without canceling a corresponding number of finally rejected claims.						
NOTE: <u>See Continuation Sheet</u> .						
3. Applicant's reply has overcome the following rejection(s): See Continuation Sheet.						
4. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).						
5.☑ The a)☑ affidavit, b)☐ exhibit, or c)☑ request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet</u> .						
The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.						
For purposes of Appeal, the proposed amendment(s) a)⊠ will not be entered or b)□ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.						
The status of the claim(s) is (or will be) as follows:						
Claim(s) allowed: 46.						
Claim(s) objected to: <u>35-37 and 40-42</u> .						
Claim(s) rejected: <u>33,34,38,39,43-45 and 47-63</u> .						
Claim(s) withdrawn from consideration:						
☐ The proposed drawing correction filed on is a)☐ approved or b)☐ disapproved by the Examiner.						
. ☐ Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s)						
10.⊠ Other: <u>See Continuation Sheet</u>						
Patent and Trademark Office						



New issues: 112, 1st, written description and enablement: The instant specification fails to provide guidance for or describe any isolated nucleic acid that encodes an SBEII enzyme other than SEQ ID NO:29 and the non-elected sequences SEQ ID NOs:31 and 33 and fails to provide guidance for or describe a nucleic acid that encodes an effective portion of any cassava SBEII.

Continuation of 3. Applicant's reply would have overcome the following rejection(s): Amendment to state that the nucleic acids were isolated from cassava would obviate the 102(b) rejection over Fisher.

Continuation of 5. does NOT place the application in condition for allowance because: DECLARATION of Joseph L Emling:

The declaration states that plants transformed with the cDNA SEQ ID NO:33 in the antisense orientation produced starch with altered viscosity. This is not found persuasive because the plants were not transformed with the elected sequence, SEQ ID NO:28, in the antisense orientation. Jobling et al, cited in the Office action mailed 23 August, 2001, teach that a minor form of SBE in potato is responsible for the amylopectin structure in that plant; thus, transformation with the elected sequence may not affect amylopectin structure in cassava.

112 1<sup>st</sup>, enablement: The instant specification fails to provide guidance for any isolated nucleic acid that encodes an SBEII enzyme other than SEQ ID NO:29 and the non-elected sequences SEQ ID NOs:31 and 33 and fails to provide guidance for or describe a nucleic acid that encodes an effective portion of any cassava SBEII or how to make or isolate nucleic acids with 88% identity to SEQ ID NO:28. The specification also does not teach nucleic acids of at least 300-600 bp that have 88% identity to SEQ ID NO:28 and encode a protein with SBEII activity (other than SEQ ID NO:28 itself). The degenerative nature of the genetic code is not at issue, as all nucleic acids encoding SEQ ID NO:29 are enabled.

112, 1<sup>st</sup>, written description: The instant specification fails to describe any isolated nucleic acid that encodes an SBEII enzyme other than SEQ ID NO:29 and the non-elected sequences SEQ ID NOs:31 and 33 and fails to describe a nucleic acid that encodes an effective portion of any cassava SBEII. The specification also does not describe nucleic acids that have 88% identity to SEQ ID NO:28 or nucleic acids of at least 300-600 bp that have 88% identity to SEQ ID NO:28 and encode a protein with SBEII activity (other than SEQ ID NO:28 itself).

112, 2<sup>nd</sup>: The specification does not say what "effective portion" IS defined as, but only says what it "may be defined as" (pg 3, last paragraph).

## Continuation of 10. Other:

Sequence identifiers are missing from the legends of figures 2-10 and 13. See MPEP 2422.02. Full compliance with the sequence rules is required in response to this action.

The amendments to the specification have not been entered because the claims were not entered, but the amendments to the specification would be entered if submitted with allowable claims.

Claims 35-37 and 40-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

DAVID T. FOX
PRIMARY EXAMINER

GROUP 180/6 38
Seeced